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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/483,699	01/14/2000	Scott A. Deyoe	DP-302096	8714

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DELPHI TECHNOLOGIES, INC.
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EXAMINER

ARMSTRONG, ANGELA A

ART UNIT PAPER NUMBER

2654

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/483,699

Applicant(s)

DEYOE ET AL

Examiner

Angela A. Armstrong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-23, 25-40 and 42-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 10-20, 23, 25-37, 40 and 42-48 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 21, 22, 38, 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 8-14, 16-20 and 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surace et al (US Patent No. 6,144,938) in view of Polikaitis et al (US Patent No. 6,336,091), and further in view of Martin et al (US Patent No. 5,553,121).

3. Regarding claims 1-5, 8-14, 16-20 and 23-31, Surace et al teach

memory for storing information at col. 3, lines 41-42

a processor coupled to the memory at Figure 1, element 105; col. 3, line 42

receiving voice input from the user via microphone at col. 3, lines 55-58

providing voice feedback to the user via speaker at col. 3, lines 55-58

detecting whether the user has provided voice input at col. 7, lines 49-51

determining whether the voice input provided by the user is recognized by the speech recognition system at col. 23, lines 34-43

performing a speech selectable task when the voice input provided by the user is recognized by the speech recognition system at col. 23, lines 43-45; col. 24, lines 1-5

tracking the users interaction with system at col. 14, lines 52-57

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voice feedback provided to the user is level dependent and provides available commands for a current level at the Abstract; col. 10, lines 21 continuing to col. 11, line 25; col. 16, line 65 to col. 17, line 1.

Surace does not specifically teach determining whether a voice input is associated with a specific user that is recognized by the speech recognition driven system. However, providing user authentication or identification was well known in the art, for the purpose of providing secure access to personal data and systems and it would have been obvious to modify the system of Surace to provide for voice authentication or identification of system subscribers for the purpose of ensuring that a subscribers access and transactions performed using the voice user interface is secure.

Surace et al do not specifically teach providing adaptive voice feedback to the user when the user has not provided a voice input for a predetermined user specific time period. Refer to Polikaitis et al who discloses a system for screening speech recognition input which implements alerting or providing feedback to the user if the voice input provided by the user during a recognition window contains errors (col. 2, lines 46-48), such as a user not saying anything during the recognition window (col. 1, lines 44-51)

an adjustable recognition window (col. 9, lines 35-52)
deactivating the speech recognition system when the voice input from the user is not recognized by the speech recognition system (col. 2, lines 48-50)

activating the speech recognition system (col. 5, lines 48-50)

activating the speech recognition system via a switch (col. 5, lines 51-52)

activating the speech recognition system via voice (col. 5, lines 51-53)

Polikaitis et al teach that the system is advantageous for providing feedback instructing a user how to improve the speech input for optimizing the speech recognition system.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the speech recognition user interface of Surace et al to implement providing voice feedback to the user when the user has not provided a voice input during a recognition window and deactivating the speech recognition system when the voice input from the user is not recognized by the speech recognition system as taught by Polikaitis et al, for the purpose of providing feedback instructing a user how to improve the speech input for optimizing the speech recognition system, as suggested by Polikaitis et al.

Surace and Polikaitis do not teach a user specific time period. Refer to Martin (col. 5, line 55-57; col. 6, line 30 to col. 7, line 13; col. 7, line 45 to col. 8, line 27) who teaches a voice response system for varying the voice menus and segments presented to the user of a voice response system according to the competence of the user. The user's average response time is measured and stored in a user profile and is used for subsequent user interaction with the facility. As the user's average response time changes, the new response time is stored and the system provides interacts and provides feedback according to the user's competence.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to implement a user specific response time period as suggested by Martin, in the voice user interface system of Surace, for the purpose of allowing experienced users the capabilities of entering requests or information without waiting for the elapsing of novice or inexperienced level response periods, as suggested by Martin (col. 1, lines 63-67).

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5. Claims 15, 32-37, and 40-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surace et al (US Patent No. 6,144,938) in view of Polikaitis et al (US Patent No. 6,336,091) and Martin (US Patent No. 5,553,121) and further in view of Everhart et al (US Patent No. 6,240,347).

6. Regarding claims 15, 32-37, and 40-48 Surace et al teach
memory for storing information at col. 3, lines 41-42
a processor coupled to the memory at Figure 1, element 105; col. 3, line 42
receiving voice input from the user via microphone at col. 3, lines 55-58
providing voice feedback to the user via speaker at col. 3, lines 55-58
detecting whether the user has provided voice input at col. 7, lines 49-51
determining whether the voice input provided by the user is recognized by the speech
recognition system at col. 23, lines 34-43
performing a speech selectable task when the voice input provided by the user is
recognized by the speech recognition system at col. 23, lines 43-45; col. 24, lines 1-5
tracking the users interaction with system at col. 14, lines 52-57
voice feedback provided to the user is level dependent at col. 10, lines 21-46; col. 16, line
65 to col. 17, line 1.

Surace does not specifically teach determining whether a voice input is associated with a specific user that is recognized by the speech recognition driven system. However, providing user authentication or identification was well known in the art, for the purpose of providing secure access to personal data and systems and it would have been obvious to modify the system

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of Surace to provide for voice authentication or identification of system subscribers for the purpose of ensuring that a subscribers access and transactions performed using the voice user interface is secure.

Surace et al do not specifically teach providing adaptive voice feedback to the user when the user has not provided a voice input for a predetermined user specific time period. Refer to Polikaitis et al who discloses a system for screening speech recognition input which implements alerting or providing feedback to the user if the voice input provided by the user during a recognition window contains errors (col. 2, lines 46-48), such as a user not saying anything during the recognition window (col. 1, lines 44-51)

a user specified or manufacturer specified recognition window (col. 9, lines 35-52)
deactivating the speech recognition system when the voice input from the user is not recognized by the speech recognition system (col. 2, lines 48-50)

activating the speech recognition system (col. 5, lines 48-50)

activating the speech recognition system via a switch (col. 5, lines 51-52)

activating the speech recognition system via voice (col. 5, lines 51-53)

Polikaitis et al teach that the system is advantageous for providing feedback instructing a user how to improve the speech input for optimizing the speech recognition system.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the speech recognition user interface of Surace et al to implement providing voice feedback to the user when the user has not provided a voice input during a recognition window and deactivating the speech recognition system when the voice input from the user is not recognized by the speech recognition system as taught by Polikaitis et al, for the purpose of

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providing feedback instructing a user how to improve the speech input for optimizing the speech recognition system, as suggested by Polikaitis et al.

Surace and Polikaitis do not teach a user specific time period. Refer to Martin (col. 5, line 55-57; col. 6, line 30 to col. 7, line 13; col. 7, line 45 to col. 8, line 27) who teaches a voice response system for varying the voice menus and segments presented to the user of a voice response system according to the competence of the user. The user's average response time is measured and stored in a user profile and is used for subsequent user interaction with the facility. As the user's average response time changes, the new response time is stored and the system provides interacts and provides feedback according to the user's competence.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to implement a user specific response time period as suggested by Martin, in the voice user interface system of Surace, for the purpose of allowing experienced users the capabilities of entering requests or information without waiting for the elapsing of novice or inexperienced level response periods, as suggested by Martin (col. 1, lines 63-67).

Surace do not specifically teach that the speech selectable task is performed by a motor vehicle accessory. Refer to Everhart et al who teach a user interface for a voice control system for controlling a plurality of adjustable parameters of vehicle accessories (abstract). Everhart teaches that voice control systems are advantageous because it allows a driver to take advantage of the accessories of the vehicle without interfering with the task of driving (col. 1, lines 11-25).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the system of Surace and Polikaitis et al to allow for implementation of the speech recognition user interface in a motor vehicle accessory system, as taught by Everhart et al, so as

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to provide feedback instructing a user how to improve the speech input for optimizing the speech recognition system, as taught by Polikaitis et al, thus ensuring that the user is able to take advantage of the accessories of the vehicle without interfering with the task of driving, as suggested by Everhart et al.

Allowable Subject Matter

7. Claims 6-7, 21-22, and 38-39 are objected to as being dependent upon a rejected base claim, but would be allowable over the cited prior art if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed December 28, 2004, have been fully considered but they are not persuasive.

9. Applicant argues Martin is not directed to a system that receives voice input. The Examiner argues Surace and Polikaitis provide support for a speech recognition system, which receives voice input.

Applicant argues Martin does not teach or suggest when to provide adaptive voice feedback. The Examiner argues Polikaitis was cited as teaching alerting or providing feedback to the user if the voice input provided by the user during the recognition window contains errors, such as the user not saying anything during the recognition window (col. 1, lines 44-51; col. 2, lines 46-48).

Applicant argues the fact that Polikaitis discloses that prior art speech recognition systems have not worked when a user does not say anything during a recognition window does not in combination with Surace teach or suggest Applicants' claimed subject matter. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant also argues there is no teaching or suggestion in Surace and/or Polikaitis and/or Martin (and/or Everhart, with respect to claim 33) that is directed to using a user specific time period to determine when to provide adaptive voice feedback to a specific user associated with the user specific time period. Applicant also argues there is no teaching or suggestion that is directed to providing adaptive voice feedback that is level dependent. The Examiner argues the combination of the references provide support for the limitation since the references teach determining when the user has provided voice input, providing voice feedback to the user, alerting or providing feedback to the user if the user does not say anything during an adjustable recognition window, and a system interacting and providing feedback to a user as a user's average response time changes.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the

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applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 571-272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Angela A Armstrong
Examiner
Art Unit 2654

AAA
May 31, 2005

Angela Armstrong